WE CLAIM:

1. A protein comprising a recombinant uricase protein of a mammalian species which has been modified to insert one or more lysine residues.

2. A protein according to claim 1 wherein said recombinant protein is a chimeric protein of two or more mammalian amino acid sequences.

3. A protein of claim 2 wherein said recombinant uricase chimeric protein comprises 304 amino acids, the first 225 N-terminal portion of said 304 amino acids being amino acids 1-225 of porcine uricase and the remaining 79 amino acids of said 304 amino acids being amino acids 226-304 of baboon uricase.

4. A protein of claim 2 wherein said recombinant uricase chimeric protein comprises 304 amino acids, the first 288 N-terminal portion of said 304 amino acids being amino acids 1-288 of porcine uricase and the remaining 16 amino acids of said 304 amino acids being amino acids 289-304 of baboon uricase.

5. A recombinant uricase protein selected from the group consisting of SEQ ID NO:s 2 , 4, 8, 9, 10 and 11.

6. An isolated and purified nucleic acid molecule coding the recombinant uricase of claim 1.

7. An isolated and purified nucleic acid molecule coding the recombinant uricase of claim 3.

8. An isolated and purified nucleic acid molecule coding a recombinant uricase of claim 4.

9. An isolated and purified nucleic acid molecule coding a recombinant uricase of claim 5.

10. An isolated and purified nucleic acid molecule of claim 9 having a base sequence of SEQ ID NO:1.

11. An isolated and purified nucleic acid molecule of claim 9 having a base sequence of SEQ ID NO:3.

12. A vector comprising a nucleic acid molecule of claim 1.

13. A vector comprising a nucleic acid molecule of claim 9.

14. A host cell comprising a vector according to claim 12.

15. A host cell comprising a vector according to claim 13.

16. A method of increasing the available non-deleterious PEG attachment sites to a uricase protein comprising mutating a uricase protein whereby at least one lysine residue is introduced therein.

17. A method of increasing the available non-deleterious PEG attachment sites to a uricase protein comprising mutating a uricase protein whereby at least one lysine residue is introduced therein in the place of an arginine.